

Communicable Diseases Weekly Report

Week 5, 1 to 7 February 2016

In summary, we report:

- [Hepatitis D](#) – two new cases
- [Influenza](#) – increased out-of-season activity with the A(H1N1) strain
- [Summary of notifiable conditions activity in NSW](#)

For further information on infectious diseases on-line see [NSW Health Infectious Diseases](#). Also see [NSW Health Infectious Diseases Reports](#) for links to other surveillance reports.

Hepatitis D

Two new case of hepatitis D, also called delta hepatitis, were recently reported. There is no indication that the cases are linked to a common source.

Hepatitis D is the least common but most severe form of viral hepatitis. Hepatitis D virus is a defective virus that requires the helper function of the hepatitis B virus to multiply and is therefore only found in people who are infected with hepatitis B. Hepatitis D is not commonly identified, with an average of 11 cases reported in NSW each year.

The symptoms of hepatitis D are similar to hepatitis B, and include: a mild flu-like illness, a yellowing of the skin and eyes (jaundice), abdominal pain, loss of appetite, nausea and vomiting, dark urine and fatigue.

Hepatitis D is found in the blood and so is spread in similar ways to hepatitis B. Infection can occur through sharing injecting equipment, or through needle stick or sharps injuries. It is less common for hepatitis D to be spread through sexual contact, or mother to baby transmission compared to hepatitis B.

Hepatitis D infection can occur as a co-infection, which means it occurs at the same time as hepatitis B infection, or it can occur as a super-infection in people who already have chronic hepatitis B.

Most people who are co-infected with hepatitis D will clear the virus. However, some people who are co-infected with hepatitis B and hepatitis D may experience a more serious acute illness and have a higher risk (2%–20%) of developing acute liver failure compared to people infected with hepatitis B alone.

People with chronic hepatitis B who are also infected with hepatitis D usually develop chronic hepatitis D infection and have a higher risk of developing chronic liver disease and cirrhosis (scarring of the liver) than those infected with hepatitis B alone.

As infection with hepatitis D can only occur with hepatitis B, immunisation against hepatitis B infection will also prevent hepatitis D. Hepatitis B vaccination is part of the routine childhood immunisation program, with a total of four vaccine doses given at birth, 6 weeks, 4 months and 6 months of age.

There is no medication or vaccine to prevent hepatitis D super-infection in people with chronic hepatitis B. Prevention of hepatitis D super-infection can only be achieved through education to reduce exposure to infectious blood. Under the NSW Hepatitis B and C Strategies 2014-2020, NSW Health aims to reduce sharing of injecting equipment among people who inject drugs by 25 per cent by 2020.

For more information on hepatitis D go to the [Hepatitis Australia](#) website.

Follow the links to the NSW Health website for more information on [hepatitis B](#) and [vaccination](#).

Influenza – increased out-of-season activity

There were 102 influenza notifications reported this week (Table 1). This was higher than the previous week (84 notifications) and continues a trend of recent increased influenza activity with influenza A(H1N1) strains predominating. Many countries in the Northern Hemisphere are reporting high levels of influenza activity as they approach the peak of their winter influenza season, and the most commonly detected influenza strain is also influenza A(H1N1). It is likely that the increased influenza activity seen in NSW is at least partly related to overseas travellers returning with influenza infections.

The World Health Organization (WHO) has recently published a [risk assessment](#) of the influenza A(H1N1) viruses currently circulating in the Northern Hemisphere and has concluded that the hospitalization and intensive care unit (ICU) admission patterns seem to be similar to previous seasons when this virus predominated and where young/middle-aged adults experienced severe disease. Despite some genetic evolution of these A(H1N1) viruses, laboratory analyses so far have shown that most remain closely related to the A(H1N1) vaccine virus which is included in the 2016 Southern Hemisphere influenza vaccines.

People planning to travel overseas, including those going on cruise ships, should make sure they are vaccinated against influenza at least two weeks prior to departure. See the factsheet [Influenza outbreaks in travel groups](#) for further information on avoiding influenza while travelling in organised travel groups including cruise ships, and the [Staying healthy when travelling overseas](#) factsheet.

Influenza is a highly contagious respiratory illness caused by influenza viruses. There are three main types of influenza virus that cause infection in humans - types A, B and C - and many sub-types or strains. Influenza can occur throughout the year but influenza activity usually peaks in winter.

The 2016 seasonal influenza vaccines for Australia have been updated to match new strains of influenza A/H3N2 and influenza B. Influenza vaccines for the 2016 winter will become available in autumn. For people travelling prior to the 2016 vaccine becoming available, if they received the 2015 vaccine it should provide protection against the predominant Northern Hemisphere strain.

Influenza vaccination is particularly recommended (and funded under the National Immunisation Program) for all people aged 65 years and over, Aboriginal children aged from 6 months to 4 years, Aboriginal people aged 15 years and over, pregnant women, and all people aged 6 months and over with medical conditions predisposing to severe influenza. Follow the link for further information on [influenza vaccination](#).

Other practical steps to stop the spread of influenza include:

- Catch it: cover your face when you cough or sneeze
- Bin it: throw used tissues into a rubbish bin.
- Kill it: wash your hands thoroughly and often. Wash hands for at least 10 seconds, especially after coughing, sneezing or blowing your nose, or use an alcohol-based hand rub.
- Stay at home until you're well. Wait at least 24 hours after your symptoms resolve so you are less likely to infect other people.

Follow the link for further [influenza notifications data](#).

Please also note that comprehensive [NSW influenza surveillance reports](#) are also available. These are published monthly in the inter-seasonal period and weekly during the influenza season.

Follow the link to the [influenza homepage](#) for a range of additional influenza resources.

Summary of notifiable conditions activity in NSW

The following table summarises notifiable conditions activity over the reporting period (Table 1).

Table 1. NSW Notifiable conditions from 1 to 7 February 2016, by date received *

		Weekly		Year to date			Full Year	
		This week	Last week	2016	2015	2014	2015	2014
Enteric Diseases	Cryptosporidiosis	39	28	133	99	81	1038	429
	Giardiasis	111	77	412	395	274	3415	2942
	Haemolytic Uremic Syndrome	1	1	2	1	3	11	7
	Hepatitis E	1	0	4	2	2	20	38
	Rotavirus	10	20	78	52	48	1036	714
	Salmonellosis	213	203	802	724	669	4060	4302
	Shigellosis	7	3	29	23	41	167	212
Respiratory Diseases	Influenza	102	84	486	367	395	30298	20888
	Legionellosis	1	3	8	15	8	94	72
	Tuberculosis	17	5	46	34	51	437	474
Sexually Transmissible Infections	Chlamydia	399	401	2414	2475	2650	22539	22899
	Gonorrhoea	84	85	489	559	581	5400	4875
Vaccine Preventable Diseases	Adverse Event Following Immunisation	3	2	9	11	20	182	256
	Meningococcal Disease	3	3	8	4	1	46	37
	Pertussis	304	248	1750	662	273	12079	3052
	Pneumococcal Disease (Invasive)	9	2	34	27	25	497	511
Vector Borne Diseases	Barmah Forest	1	0	4	14	24	185	163
	Dengue	9	3	28	48	57	338	378
	Malaria	2	0	5	4	11	47	87
	Ross River	12	8	48	141	43	1642	673
Zoonotic Diseases	Q fever	4	3	18	24	39	260	190

* Notes on Table 1: NSW Notifiable Conditions activity

- Data cells represent the number of case reports received by NSW Public Health Units and recorded on the NSW Notifiable Conditions Information Management System (NCIMS) in the relevant period.
- Data cells in the 'Adverse Event Following Immunisation' category refer to suspected cases only. These reports are referred to the Therapeutic Goods Administration (TGA) for assessment. Data on adverse events following immunisation is available online from the TGA Database of Adverse Event Notifications.
- Only conditions for which at least one case report was received appear in the table. HIV and other blood-borne virus case reports are not included here but are available from the Infectious Diseases Data webpage.